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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,130	09/10/2003	Christopher Patrick Lawson	GJ-246J	3558
7590	12/05/2005		EXAMINER	
IANDIORIO & TESKA INTELLECTUAL PROPERTY LAW ATTORNEYS 260 BEAR HILL ROAD WALTHAM, MA 02451-1018			NATNITHITHADHA, NAVIN	
			ART UNIT	PAPER NUMBER
			3736	
DATE MAILED: 12/05/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/659,130	LAWSON, CHRISTOPHER PATRICK
Examiner	Art Unit	
Navin Natnithithadha	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 22 September 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-13 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 10 September 2003 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in United Kingdom on 11 September 2005.

### ***Examiner's Comment***

3. Claim 1 uses "for" in the functional limitation of the elements of the apparatus. Using "for" language is a recitation of the intended use of the claimed invention, which must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

### ***Drawings***

4. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are informal and contain corrections. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

5. The disclosure is objected to because of the following informalities:

The Specification does not contain section headings (see below). Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Claim Objections***

6. Claim 1 is objected to because of the following informalities:

In lines 4-10, the recitation of "microprocessor control means, the microprocessor control means being such that it is able to control the motor to cause the variable orifice valve to vary its orifice size and thereby to maintain a constant predetermined pressure and enable measurement of the flow rate generated by the person, or to maintain a constant predetermined flow rate and enable the measurement of the pressure generated by the person" lacks clarity in defining the function of the microprocessor control means. Appropriate correction is required.

7. Claim 1 is objected to because of the following informalities:

In line 4, the recitation of "microprocessor control means" invokes 35 U.S.C. 112, sixth paragraph, by using the phrase "means". In order to properly invoke 35 U.S.C. 112, sixth paragraph, the Applicant should amend the claimed element to "a means for controlling a microprocessor". However, it does not appear that the Applicant intended to invoke 35 U.S.C. 112, sixth paragraph, and only intended to recite a microprocessor controller or microprocessor control unit/device based on the Applicant's disclosure.

8. Claim 2 is objected to because of the following informalities:

In line 2, "the control circuit" lacks antecedent basis. Appropriate correction is required.

9. Claims 3-13 are objected to because of the following informalities:

In line 1 of each claim, "in which" should be amended to - - wherein - - to properly recite a further limitation. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4, 6, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Jiang et al, US 6,030,350 A (hereinafter referred to as Jiang).

Claim 1: Jiang teaches an apparatus (see fig. 2), comprising: a mouthpiece 2; a flow transducer 11 (see col. 9, lines 60-61); a pressure transducer 7 (see col. 10, lines 13-14); a variable orifice valve (shutter valve) 4 controlled by a motor (see col. 5, lines 63-65); and a microprocessor control means (computer) 6. Since Jiang teaches the structure of the claim, the recitation of "measuring the strength of a person's respiratory muscles" and "being such that it is able to control the motor to cause the variable orifice valve to vary its orifice size and thereby to maintain a constant predetermined pressure and enable measurement of the flow rate generated by the person, or to maintain a constant predetermined flow rate and enable the measurement of the pressure generated by the person" is merely functional language and, thus, a matter of intended use.

Claim 2: Jiang teaches the pneumatic and electrical interconnections of the flow transducer 11, pressure transducer 7, control circuit (valve controller) 5, and microprocessor control means 16.

Claims 3 and 4: Jiang teaches the microprocessor control means 16 as a standard personal computer including a circuit, display means (display screen), and a keypad (see fig. 2).

Claims 6 and 13: Jiang teaches a rotary or flat plate variable orifice valve 4 as a shutter type valve (see col. 5, lines 63-65).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang et al, US 6,030,350 A, as applied to claim 1 above, and further in view of either Bacaner et al, US 4,966,141 (hereinafter referred to as Bacaner).

Claim 5: Jiang does not teach the mouthpiece has a flange. However, Bacaner teaches a disposable mouthpiece 200 including a flange 203 (see fig. 19 and col. 19, lines 52-53). Thus, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Jiang's mouthpiece to include flange as taught

by Bacaner in order to provide a disposable mouthpiece that effectively engages the face of the patient surrounding the mouth (see Bacaner, col. 19, lines 55-57).

12. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang et al, US 6,030,350 A, as applied to claim 6 above.

Claims 7-12: Jiang teaches using many suitable valves and valve controllers are known and available, such a balloon valve or shutter valve which can be opened and closed by a motor (see col. 5, lines 58-65). Jiang does not explicitly teach the type of valve structures in claims 7-12. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the valve structures claimed because Applicant has not disclosed that these valve structures provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a balloon valve or shutter valve because Jiang states that these valves are suitable valves for obstructing airflow (see col. 5, lines 39-65). Therefore, it would have been obvious matter of design choice to modify Jiang to have a valve assembly 4 as specified in claims 7-12.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,863,656 B2, US 5,630,411 A, US 5,233,998 A, and US 4,564,021 A

additionally teach the subject matter of the Applicant's claims. The Examiner suggests reviewing these patents in responding to this Office Action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navin Natnithithadha whose telephone number is (571) 272-4732. The examiner can normally be reached on Monday-Friday, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Patent Examiner  
GAU 3736  
01 December 2005